

TWO APPROPRIATION BUDGET/MISSION SUPPORT

FISCAL YEAR 2003 ESTIMATES

BUDGET SUMMARY

OFFICE OF SAFETY & MISSION ASSURANCE
OFFICE OF THE CHIEF ENGINEER
OFFICE OF THE CHIEF TECHNOLOGIST

SAFETY, MISSION ASSURANCE, ENGINEERING
AND ADVANCED CONCEPTS

	FY 2001 OP PLAN <u>REVISED</u>	FY 2002 INITIAL <u>OP PLAN*</u>	FY 2003 PRES <u>BUDGET*</u>
		(Millions of Dollars)	
Safety and Mission Assurance*	25.1	[28.5]	[28.5]
Engineering*	17.5	[19.1]	[19.1]
Advanced Concepts**	<u>4.8</u>	--	--
Total	<u>47.4</u>	<u>[47.6]</u>	<u>[47.6]</u>

Distribution of Program Amount by Installation

Johnson Space Center	7.2	[7.2]	[8.7]
Kennedy Space Center	0.4	[0.7]	[0.7]
Marshall Space Flight Center	3.2	[3.1]	[3.6]
Stennis Space Center	0.1	[0.2]	[0.4]
Ames Flight Research Center	1.2	[0.6]	[1.0]
Dryden Research Center	0.2	[0.2]	[1.0]
Langley Research Center	5.9	[5.5]	[5.8]
Glenn Research Center	2.5	[2.5]	[2.1]
Goddard Space Flight Center	15.6	[12.2]	[12.6]
Jet Propulsion Laboratory	7.3	[7.7]	[7.3]
Headquarters	<u>3.9</u>	<u>[7.7]</u>	<u>[4.4]</u>
Total	<u>47.4</u>	<u>[47.6]</u>	<u>[47.6]</u>

**Beginning in FY 2002, SMA&E is included in the Human Space Flight Appropriation. Funding is shown for display purposes only.*

***Beginning in FY 2002, Advanced Concepts is funded in the SAT appropriation within the Aerospace Technology Program*

DESCRIPTION/JUSTIFICATION

The Safety, Mission Assurance, Engineering, and Advanced Concepts (SMAEAC) area is an investment to enable the safety and success of all NASA programs. The SMAEAC budget supports the activities of the Office of Safety and Mission Assurance (OSMA), the Office of the Chief Engineer (OCE), and the activities of the former Office of the Chief Technologist (OCT) that were assumed by the Office of Aerospace Technology (OAT) in FY 2000. These Offices advise the Administrator, oversee NASA programs, develop Agency-wide policies and standards, and support the technology requirements of NASA flight programs. Each area is discussed separately.

Safety and Mission Assurance (SMA) assures that sound and robust SMA strategies, processes, and tools are in place to enable safe and successful missions. It establishes strategies, policies, and standards, and assures that effective and efficient processes and tools are appropriately applied throughout the program life cycle. SMA analyzes, oversees, and independently assesses programs and flight and ground operations to assure that attention is placed on risk, missions are conducted safely, and there is a high probability of meeting Agency objectives. SMA funds research, development, pilot application, and evaluation of tools, techniques, and practices that advance NASA's capabilities in areas such as facility and operational safety, risk management, human reliability, software assurance, and risk analysis. Funding also develops SMA training courses.

The OCE oversees the conduct and improvement of NASA's engineering practice, manages the strategic crosscutting process to "Provide Aerospace Products and Capabilities" and independently evaluates ongoing programs, proposed concepts, and options for new programs. The OCE establishes policies, standards, guidance, and support for improving NASA engineering practices and technical capabilities, and manages the NASA Electronics Parts and Packaging Program, which supports evaluation and infusion of advanced electronic parts and packaging technology into NASA programs.

The Office of Aerospace Technology (OAT) is NASA's principal advocate for advanced technology. As such, the OAT advises the Administrator on technology matters and develops a NASA-wide investment strategy for innovative and advanced technology. The office leads the development of NASA-wide technology goals and objectives and oversees NASA technology policies, programs, processes, and capabilities. OAT also sponsors the NASA Institute for Advanced Concepts (NIAC), which addresses NASA strategic objectives requiring technology readiness ten to twenty years into the future.

PROGRAM STATUS/NOTIFICATIONS/PLANS THROUGH 2002

With the Mission Support appropriation now discontinued, the budget for these activities were dispersed beginning in FY 2002. Safety, Mission Assurance and Engineering (SMA&E) is now funded in the Human Space appropriation as a separate program while Advanced Concepts is now funded in the SAT appropriation under Aerospace Technology. Additional information on these projects can now be found in their respective sections.